ABSTRACT OF THE DISCLOSURE

Olefins are oligomerized by contacting an olefin with a catalyst system that is comprised of a) at least one transition metal complex that is complexed with a polydentate complexing ligand and b) an alkylaluminoxane, each component being present in such amounts that the molar ratio of aluminum transition metal is greater than 10, wherein at least part of the amount of the transition metal complex is added continuously or in portions during the oligomerization.